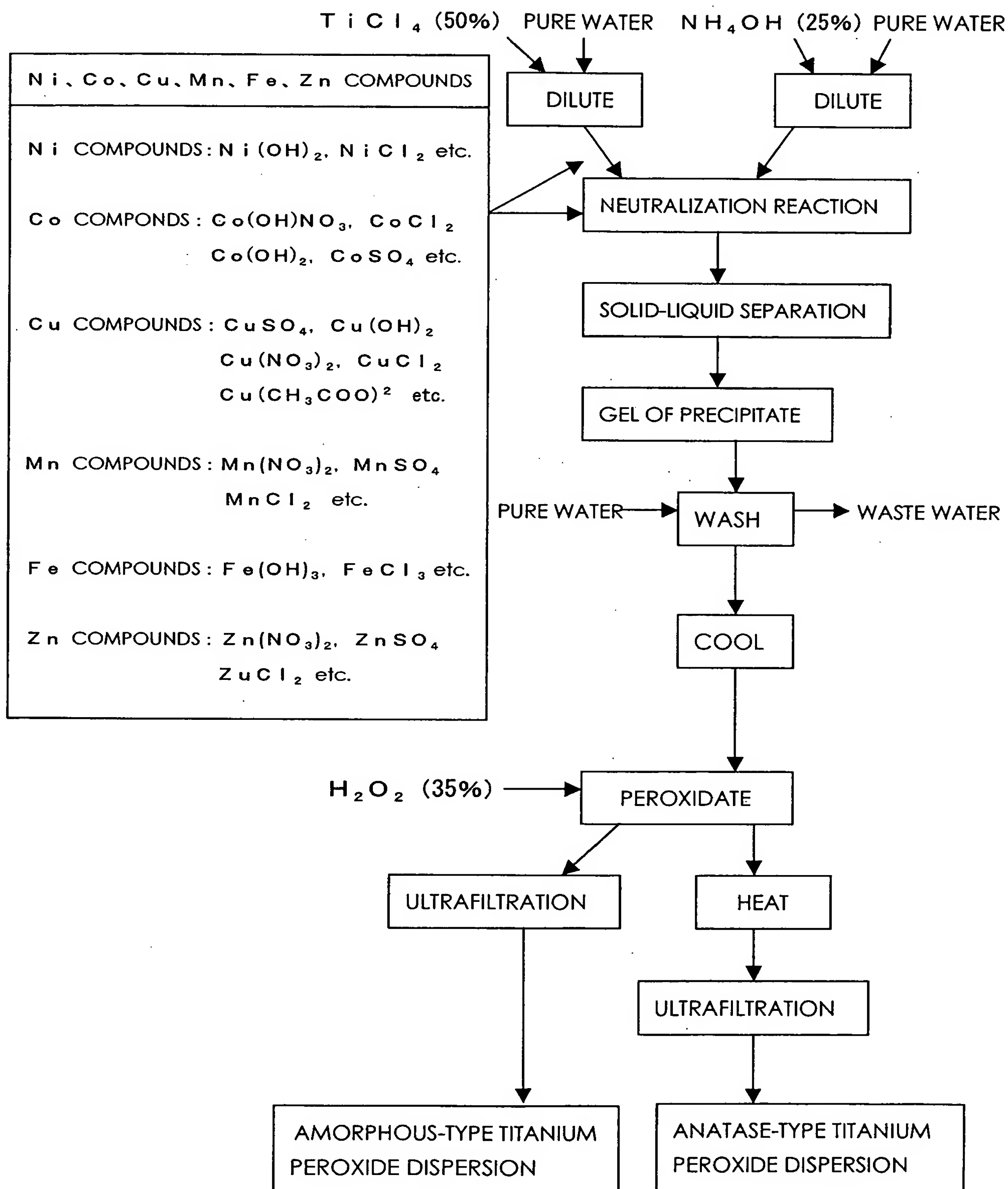
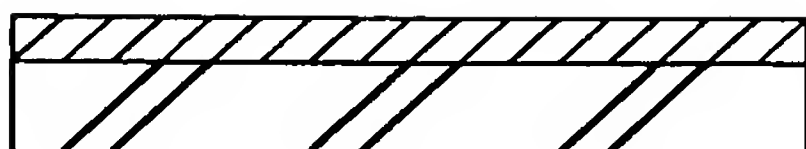


【FIG. 1】



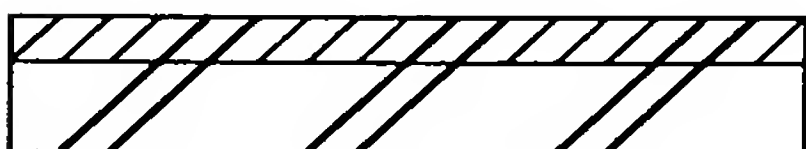
【FIG. 2】

A



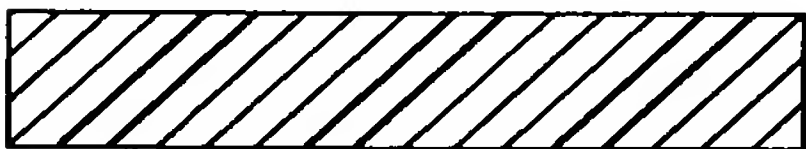
BUILD UP LAYER ON SUBSTRATE

B



PERMEATE INTO SUBSTRATE SURFACE

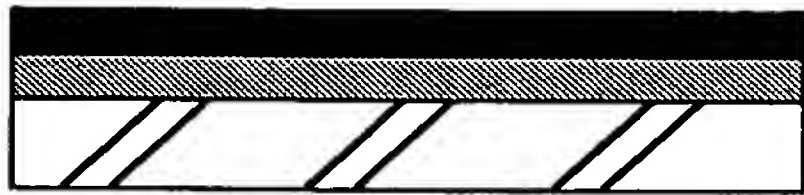
C



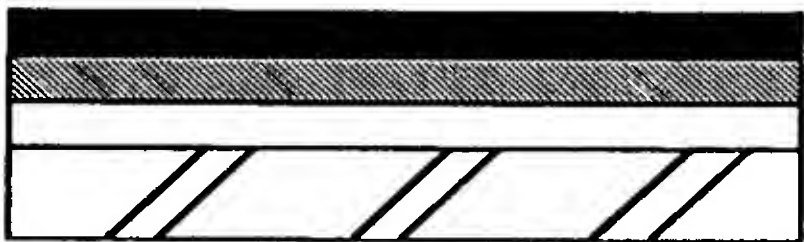
MIX INTO SUBSTRATE

【FIG. 3】

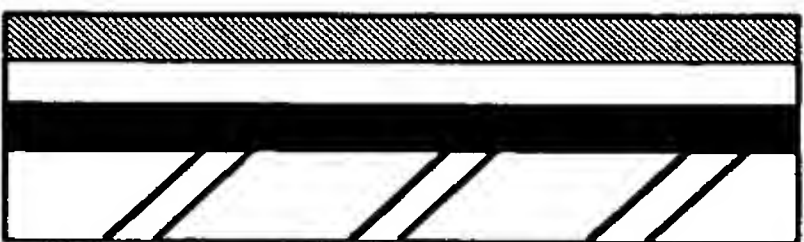
A



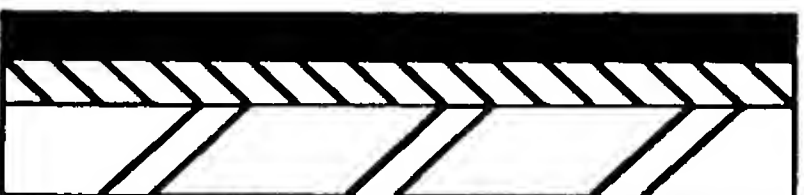
B



C



D



ORGANIC DYE/PIGMENT, OR ORGANIC  
POLYMER RESIN CONTAINING ORGANIC  
DYE/PIGMENT



COATING FILM CONTAINING AMORPHOUS-  
TYPE TITANIUM OXIDE DOPED WITH ONE OUT  
OF COMPOUNDS OF Mn, Cu, Ni, Fe AND Zn



COATING FILM CONTAINING AMORPHOUS-  
TYPE TITANIUM OXIDE DOPED WITH  
COMPOUND OF Mn OR Cu (EXCEPT IN THE  
CASE OF A 2-LAYER COATING, A  
COMBINATION IN WHICH BOTH ARE DOPED  
WITH THE SAME METAL COMPOUND IS NOT  
USED)

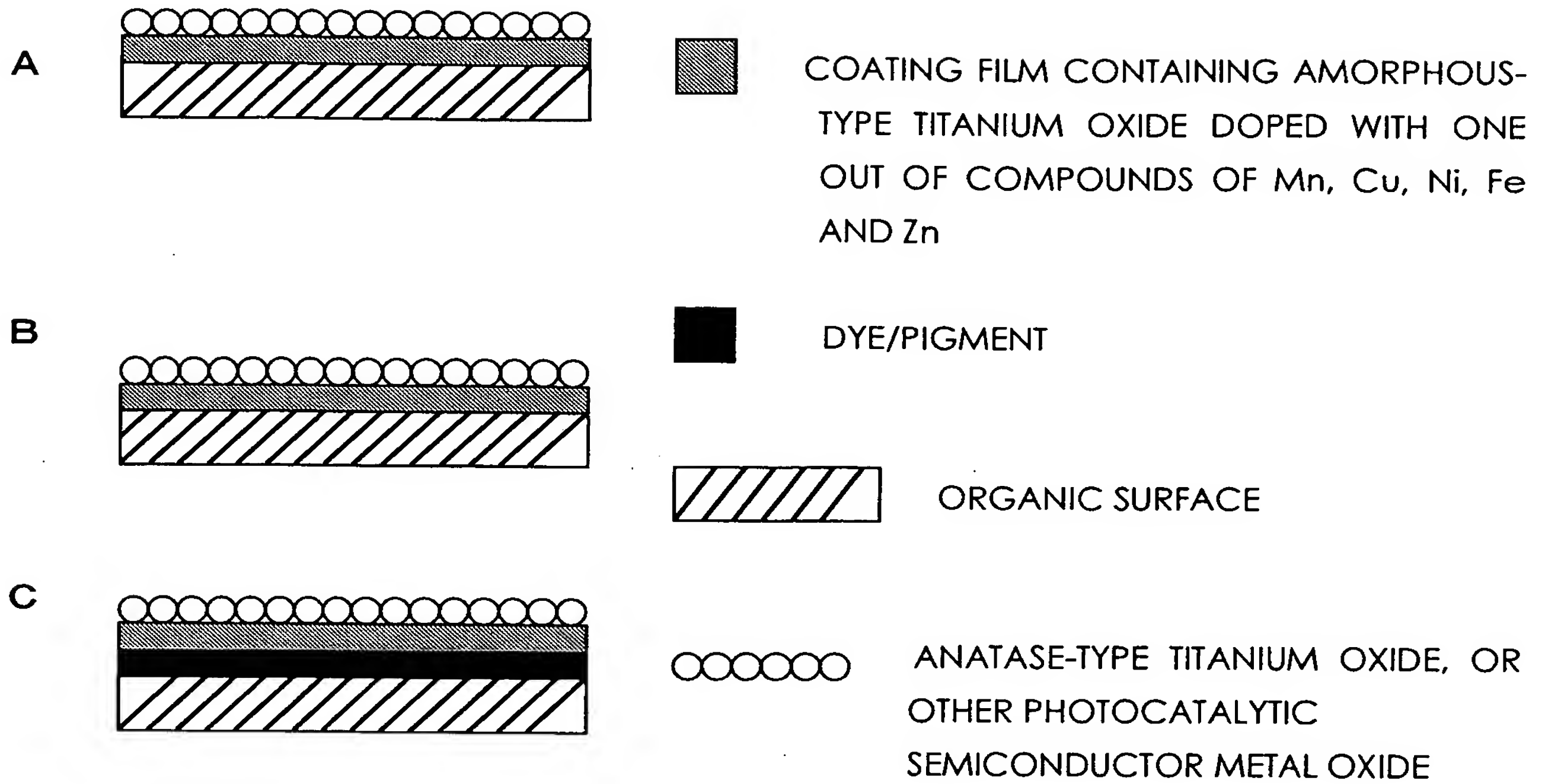


COATING FILM CONTAINING MIXTURE OR  
AMORPHOUS-TYPE TITANIUM OXIDE DOPED  
WITH Mn COMPOUND AND AMORPHOUS-  
TYPE TITANIUM OXIDE DOPED WITH Cu  
COMPOUND

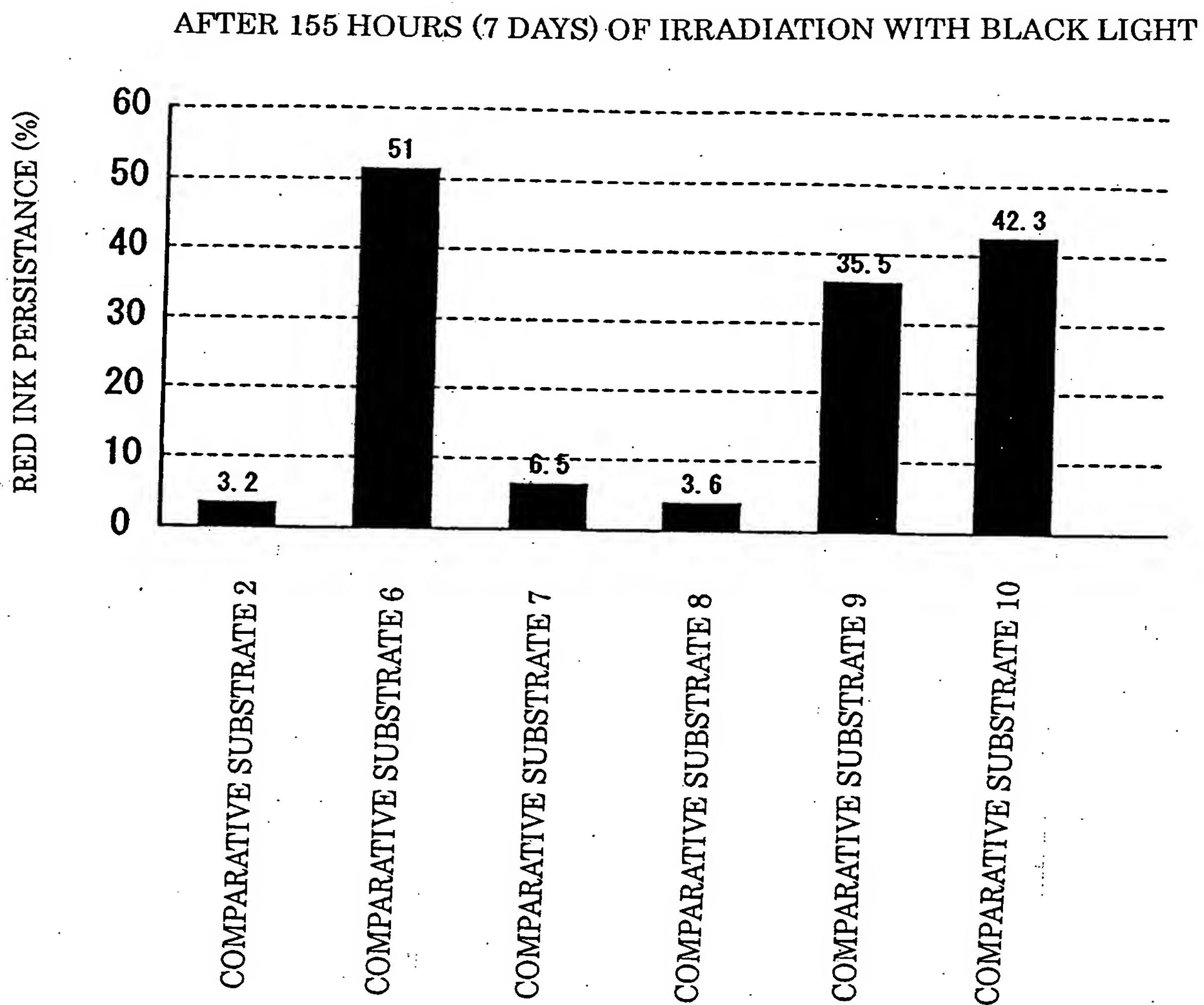


SUBSTRATE

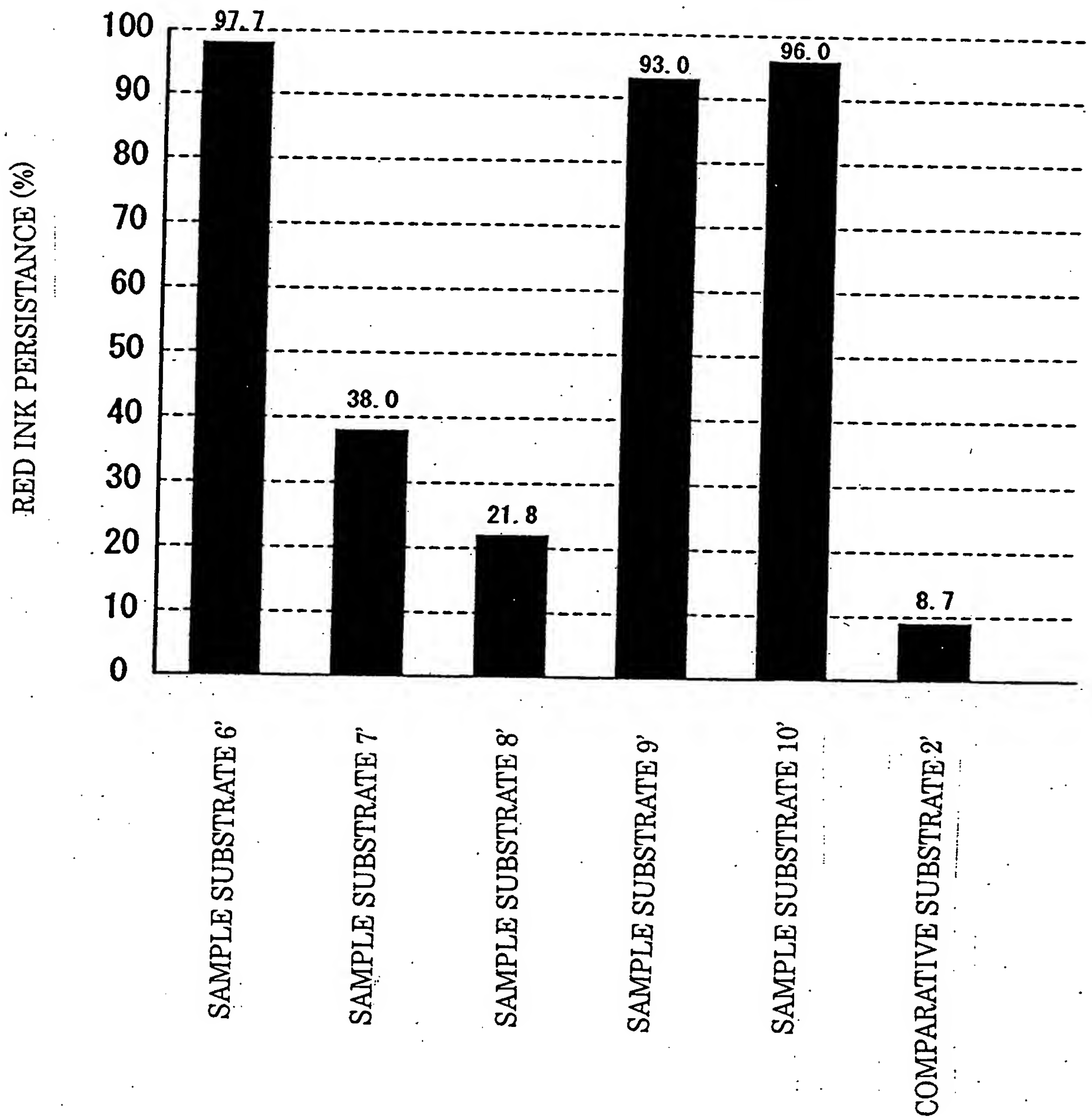
【FIG. 4】



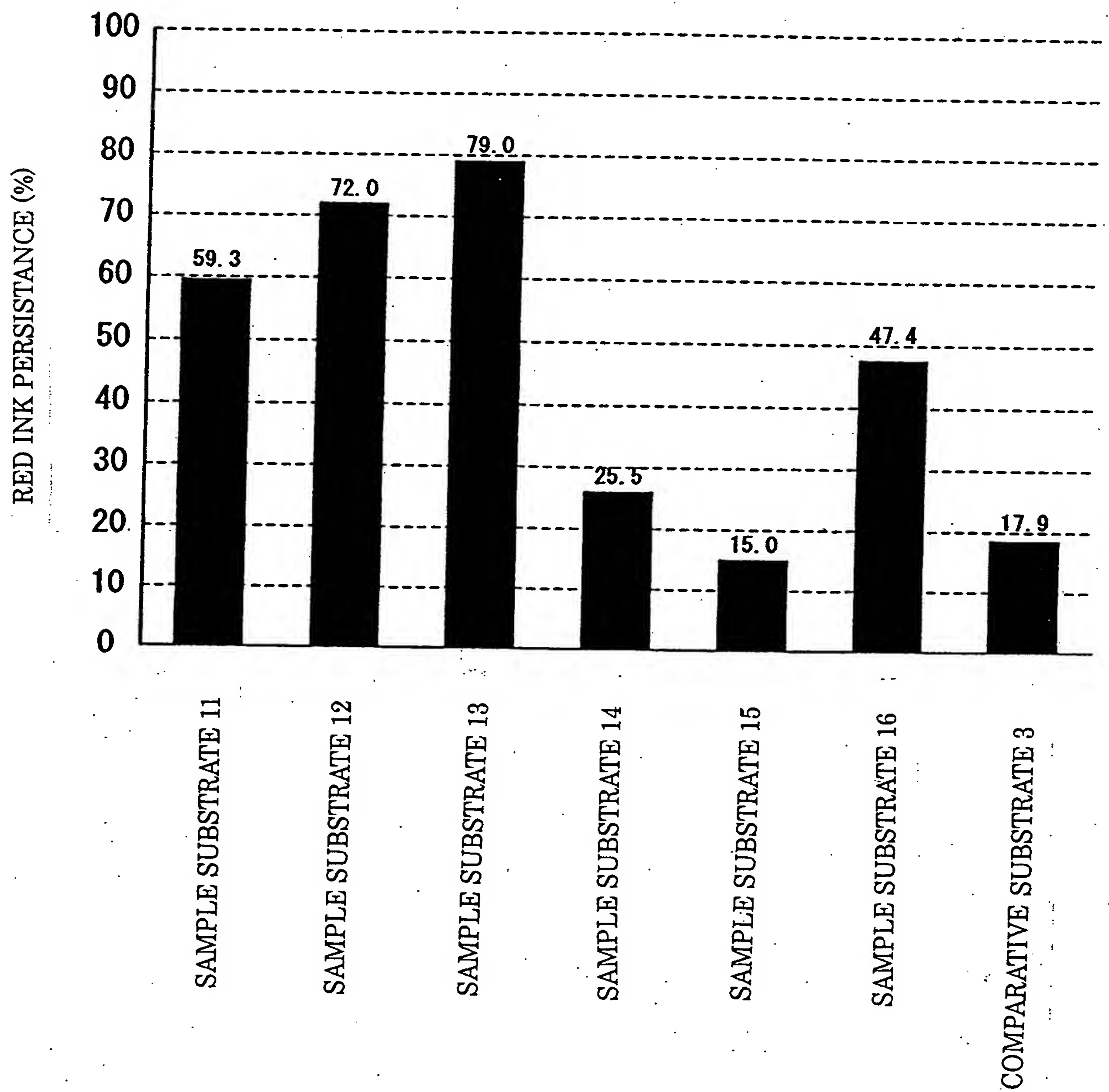
【FIG. 5】



【 FIG. 6 】



【 FIG. 7】



【FIG. 8】

